# NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

# HEALTH AND SOCIAL CARE DIRECTORATE QUALITY STANDARD CONSULTATION SUMMARY REPORT

### 1 Quality standard title

Feverish illness in children

Date of Quality Standards Advisory Committee post-consultation meeting: 23 April 2014

#### 2 Introduction

The draft quality standard for feverish illness in children was made available on the NICE website for a 4-week public consultation period between 27 February and 27 March 2014. Registered stakeholders were notified by email and invited to submit consultation comments on the draft quality standard. General feedback on the quality standard and comments on individual quality statements were accepted.

Comments were received from 12 organisations, which included service providers, national organisations, professional bodies and others.

This report provides the Quality Standards Advisory Committee with a high-level summary of the consultation comments, prepared by the NICE quality standards team. It provides a basis for discussion by the Committee as part of the final meeting where the Committee will consider consultation comments. Where appropriate the quality standard will be refined with input from the Committee.

Consultation comments that may result in changes to the quality standard have been highlighted within this report. Comments suggesting changes that are outside of the process have not been included in this summary. The types of comments typically not included are those relating to source guidance recommendations and suggestions for non-accredited source guidance, requests to broaden statements out of scope, requests to include overarching outcomes, thresholds, targets, large volumes of supporting information, general comments on the role and purpose of quality standards and requests to change NICE templates. However, the Committee should read this summary alongside the full set of consultation comments, which are provided in appendices 1 and 2.

#### 3 Questions for consultation

Stakeholders were invited to respond to the following general questions:

- 1. Does this draft quality standard accurately reflect the key areas for quality improvement?
- 2. If the systems and structures were available, do you think it would be possible to collect the data for the proposed quality measures?

#### 4 General comments

The following is a summary of general (non-statement-specific) comments on the quality standard.

- This draft quality standard accurately reflects key areas for quality improvement.
- It is very important to highlight non-infectious differential diagnoses, especially
   Kawasaki disease, malignancy and autoimmune conditions. Concerns were raised
   that a search for a diagnosis should take place before day 5.
- Pharmacists can be visited by parents/carers who can identify and assist in the diagnosis, treatment and advice on signs and symptoms to look out for and when to seek medical help.
- The importance of listening to the child's parents has been highlighted.

#### Consultation comments on data collection

No comments made relating to data collection.

# 5 Summary of consultation feedback by draft statement

#### 5.1 Draft statement 1

Infants and children under 5 years who are seen by a healthcare professional have their vital signs measured and recorded if fever is suspected.

#### **Consultation comments**

Stakeholders made the following comments in relation to draft statement 1:

- Suggestions that vital signs should include blood pressure measurement and checking the child's oxygen saturation level using a paediatric oximeter.
- Concern raised that these observations may not be the most crucial in the assessment of a child.
- Suggestion that a short summary in the notes after all "feverish" consultations is helpful to subsequent clinicians.
- Comment that measuring vital signs can be very difficult and may need to be subordinate to the clinician's intuition. This draft Quality Statement appears to attempt to define the subjective.

#### 5.2 Draft statement 2

Infants and children under 5 years with unexplained fever have their risk of serious illness assessed using the <u>traffic light system</u>.

#### **Consultation comments**

Stakeholders made the following comments in relation to draft statement 2:

 Statement welcomed as it directs all health professionals to this useful system with which to assess the risk of serious illness

- Concern raised that these observations may not be the most crucial in the assessment of a child.
- Comment that the traffic light system has not been validated and removes clinical intuition.
- If a clinician has referred to the traffic light system and established that the child
  has a 'red' symptom there is no requirement to record that the symptom is a high
  risk one according to NICE.

#### 5.3 Draft statement 3

Infants and children presenting with unexplained fever of 38°C or higher have a urine sample tested within 24 hours.

#### **Consultation comments**

Stakeholders made the following comments in relation to draft statement 3:

 Concern that a clinician would need to admit all babies presenting with unexplained fever of 38°C or higher in order to obtain a urine sample within 24 hours even if there is no evidence of infection.

#### 5.4 Draft statement 4

Parents and carers of infants and children under 5 years with unexplained fever who are advised that they can care for their infant or child at home are given safety net advice, including information on when to seek further help.

#### Consultation comments

Stakeholders made the following comments in relation to draft statement 4:

- The signs of dehydration that are listed are severe signs. Suggestion to include reduced urine output in the advice to parents/carers on detecting dehydration.
- Comment that whilst defining the information in this way can be helpful, it is often the parent's intuition, third contact with healthcare or upcoming weekend that prevails.

## 6 Suggestions for additional statements

The following is a summary of stakeholder suggestions for additional statements.

 Suggestion to include a quality statement to measure the use of blood culture and CRP

## Appendix 1: Quality standard consultation comments table

ID	Stakeholder	Statement No	Comments <sup>1</sup>
1	Coventry University	General	Children with any 'red' features but who are not considered to have an immediately life-threatening illness should be urgently assessed by a healthcare professional in a face-to-face setting within 2 hours. [2007] I am unsure of the evidence base that states remote assessment is sensitive for younger children, knowing this, it is still conflicting to ignore 'red' features for a 2 hour period and extremely difficult to consider what, if any, life threatening illness exists (remotely) Separate guidance is required with a consensus and agreement of the 'evidence based software used'. Exemplar. A grunting baby requires immediate assessment. 2 hour window seems arbitrary and unsafe.
2	Coventry University	General	In this guideline, a non-paediatric practitioner is defined as a healthcare professional who has not had specific training or who does not have expertise in the assessment and treatment of children and their illnesses. This term includes healthcare professionals working in primary care, but it may also apply to many healthcare professionals in general emergency departments. The problem with this statement is that there is no definition as this is full of ambiguity. Given that this is a document concerned with best practice and standard, there is an opportunity to qualify who should be providing care to children. Paediatric specialist training years, Child diploma, MCPCH part 1/2. Advanced Nurse Practitioner (Paediatrics), Practice nurse or Nurse practitioner with specific paediatric assessment module(s). Paediatric Emergency nurse Practitioner (PENP). This may provoke some professionals, but this is an informative standard that advocates for children and families. Time to be prescriptive and address some of the inadequate health outcomes for UK children. (EU data)
3	Coventry University	General	Thank you for the time and dedication the group have shown in developing this standard.
4	The Royal College of Midwives	General	The RCM considers that this draft quality standard accurately reflects key areas for quality improvement and that if appropriate systems were available, it would be possible to collect the data for the proposed quality measures. It would facilitate implementation if there was encouragement to use a national data collection tool for these measures.
5	Royal College of Paediatrics and Child Health	General	Although these Quality Standards deal with the management of the first 5 days of an unexplained fever, we think it is very important to highlight non-infectious differential diagnoses, especially Kawasaki disease (which can be very atypical in the very young and is sometimes missed with significant consequences), but also malignancy (e.g. neuroblastoma, lymphoma, ALL without peripheral blasts) and autoimmune conditions (eg systemic JIA, vasculitis).

<sup>&</sup>lt;sup>1</sup>PLEASE NOTE: Comments received in the course of consultations carried out by NICE are published in the interests of openness and transparency, and to promote understanding of how quality standards are developed. The comments are published as a record of the submissions that NICE has received, and are not endorsed by NICE, its staff or its advisory committees.

ID	Stakeholder	Statement No	Comments <sup>1</sup>
			During the first 5 days there are clinical 'clues' e.g. from history/examination that are not always apparent and should be actively sought if diagnosis is not clear, to start considering other diagnoses. Does depend on the clinical scenario, but I think this should be commented on. It is not appropriate to shelve the question regarding search for a diagnosis, other than a simple viral infection, completely until the 5th day, however I recognise there will be a higher yield from investigating after 5 days of unexplained fever along the lines of a 'PUO'.
			References
			<ol> <li>'Pyrexia of unknown origin' pages 94-99. Paediatric Rheumatology. Oxford Specialist Handbook in Paediatrics. Oxford University Press 2012</li> </ol>
			Pyrexia of unknown origin. Wood et al. Arch Dis Child Educ Pract Ed 2004;89:ep63-ep69 doi:10.1136/adc.2004.059584
6	Royal College of Paediatrics and Child Health	General	Our concerns about the NICE standards is that they make no specific recommendations about the use of aciclovir (should be part of standard 2).
			We have been informed of a recently conducted a survey of prescribing practices across Wessex/Oxford/Bristol about babies under 1 month with fever and the use of aciclovir (we discussed 4 cases and asked people which drugs they would start). Massive variation, and very worrying that a number of neonates with classic presenting features suggesting of disseminated HSV or CNS HSV were not started on aciclovir. Need some guidance for paediatricians in the NICE fever guidelines on when empirical aciclovir should be started and which tests to send.
7	Royal College of Paediatrics and Child Health	General	We have also prioritised the 5 statements we feel should be included within the quality standard:  1 <sup>st</sup> Statement 2  2 <sup>nd</sup> Statement 1  3 <sup>rd</sup> Statement 3  4 <sup>th</sup> Statement 4
8	NHS England	General	Thank you for the opportunity to comment the draft for the above quality standard I wish to confirm that NHS England has no substantive comments to make regarding this consultation.
9	Department of Health	General	I wish to confirm that the Department of Health has no substantive comments to make, regarding this consultation
10	Royal Pharmaceutical Society	General	Community pharmacies are generally the first port of call for parents and carers who are purchasing medicines or seeking advice to treat fever in children. Pharmacists and their staff have an important role to play in identifying and assisting parents and carers in the diagnosis, treatment and advice on signs and symptoms to look out for and when to seek medical help.  Most community pharmacies also participate in a locally commissioned Minor Ailments scheme where parents and

ID	Stakeholder	Statement No	Comments <sup>1</sup>
			carers can obtain medicines for fever, coughs and colds without seeing a GP.  Community pharmacies are conveniently located and are readily accessible due to longer opening hours, and there is no need for parents and carers to make an appointment to have access to a registered health professional.
11	British Medical Association	General	We would like to reiterate the importance of listening to the child's parents. The 24 hour knowledge of a child, and of a child's normal behaviour, is important and a parent's perception of their child's state of health is valid.
12	Royal College of Nursing	General	No comments to make
13	University of Liverpool	1	Infants and children under 5 years who are seen by a healthcare professional have their vital signs measured and recorded if fever is suspected.
			Should there be something in there about repeating the vital signs after 1 or 2 hours if the child is being observed in an ED or walk-in centre. Septicaemia is rapidly progressive and vital signs can deteriorate quickly being normal at presentation and worse shortly after.
14	Royal College of Paediatrics and Child Health	1	We felt that the vital signs mentioned in this statement should include blood pressure measurement given the inclusion of blood pressure in paediatric early warning score systems.
15	British Medical Association	1	On page 6, it states: "measuring vital signs includes taking the child's temperature and measuring heart rate, respiratory rate and capillary refill time." We think that the measurement of vital signs should also include checking the child's oxygen saturation level using a paediatric oximeter as it is more reliable than capillary refill time on a dark-skinned child and it is no more difficult to do than taking a child's temperature.
16	British Medical Association	1	Measuring vital signs may be useful for those who are not well trained or experienced. However, in practice, measuring the vital signs of a screaming or fraught child can be very difficult and may need to be subordinate to the GP's or other clinician's intuition. A child who just does not look right may be difficult to define but is one of the most important ways of assessing febrile children. This draft Quality Statement appears to attempt to define the subjective.
17	Royal College of General Practitioners	1&2	Seeing the child and recording vital signs and symptoms are important. Many assessments are done over the phone or under pressure because of the sheer volume of requests. Parents need to know better when to worry and when they can manage with home treatment, but this often depends on the support and partnership and trust with the family's primary health care team. Couldn't there be a QS for that? (Trust could be measured on parents' feedback). There has been much discussion about whether or not these observations are the most crucial in the assessment of a child. Respiration and pulse and irritability can be raised with the stress of coming to the surgery or centre and being examined. If the child has been up all night, he or she can be difficult to rouse if he or she has just "settled" while waiting to be seen or on the journey to the surgery. Even infra-red thermometers and pulse oximeters are not always available and are difficult to use in some babies and infants.  Mortality is more likely to occur where the child has a long term condition as well and the signs can be masked or different from those described and difficult to assess. Context is crucial too – a GP would more readily refer a feverish young child if one of his/her siblings had died or been seriously ill, and for several other reasons unrelated to the

ID	Stakeholder	Statement No	Comments <sup>1</sup>
			actual clinical observations.
			A short summary in the notes after all "feverish" consultations is helpful to subsequent clinicians.
18	The Royal College of Midwives	2	We particularly welcome this statement which directs all health professionals to this useful system with which to assess the risk of serious illness
19	Royal College of Psychiatrists	2	In the Equality and Diversity statement no mention is made of the impact of mental health disorders other than learning disability. This should include a broader comment on autistic spectrum disorder and other mental health disorders
20	Royal College of Psychiatrists	2	No mention is made of delirium or acute confusional state in children (however it is also not mentioned in Guideline 160). Subtle behavioural changes associated with feverish illness can be a symptom of encephalitis. Refs:  1.Florance, N. R., Davis, R. L., Lam, C., Szperka, C., Zhou, L., Ahmad, S., Campen, C. J., Moss, H., Peter, N.,
			Gleichman, A. J., Glaser, C. A., Lynch, D. R., Rosenfeld, M. R. and Dalmau, J. (2009), Anti–N-methyl-D-aspartate receptor (NMDAR) encephalitis in children and adolescents. Ann Neurol., 66: 11–18. doi: 10.1002/ana.21756 2.Tselis A, Booss J. Behavioral Consequences of Infections of the Central Nervous System: With Emphasis on Viral Infections. J Am Acad Psychiatry Law 31:289–98, 2003
21	British Medical Association	2	The traffic light system has not been validated; insisting that it is used attributes more weight to the traffic light system than the GPs or other clinicians' intuition. In Anne Van de Bruel's article entitled 'Signs and Symptoms for diagnosis of serious infections in children: a prospective study in primary care', she states: "But over-reliance on vital signs with a low positive predictive value may result in the inappropriate referral of large numbers of children while children who develop a serious illness are sent away. General practitioners must not be persuaded to disregard their intuition" (please see <a href="http://www.phc.ox.ac.uk/team/researchers-n-z/ann-van-den-bruel">http://www.phc.ox.ac.uk/team/researchers-n-z/ann-van-den-bruel</a> ). We agree with Anne Van de Bruel and we would like to highlight the importance of the GP's or other clinician's intuition.
22	Royal College of Paediatrics and Child Health	3	It was suggested that there should be a quality statement to measure the use of blood culture and CRP, as these are equally as important as analysing the urine in infants and children presenting with unexplained fever.
23	British Medical Association	3	Would a GP (or other clinician) need to admit all babies presenting with unexplained fever of 38°C or higher for a urine sample within 24 hours if there is no evidence of infection? Getting a urine sample from a baby tested within 24 hours in the community is often unrealistic and many GPs would not welcome this management.
24	The Royal College of Midwives	4	We are also pleased to see in this statement about information giving that 'Service providers ensure that written safety net information is available in appropriate formats to give to parents and carers when infants and children under 5 years with unexplained fever are to be cared for at home. This information should explain when the parent or carer should access further help and be available in formats that take account of communication and language barriers'
25	Royal College of	4	Safety net advice: can be confusing and cause more anxiety to parents if we ask parents to identify dehydration.

ID	Stakeholder	Statement No	Comments <sup>1</sup>
	Paediatrics and Child Health		Some of these sign reflect severe dehydration and may lead to delayed presentation. Reduced oral intake, reduced urine output and lethargy are adequate for parents. Advice regarding the fluid volume to be given at home may be useful according to their weight.
26	Royal College of Paediatrics and Child Health	4	With regard to written safety net advice for parents, the advice about when to seek further help does not specify a time frame. Our concerns centre around parents feeling that they cannot represent so soon after just having been seen by a paediatrician. In our experience, this has sometimes led to parents representing after 24 hours when the patient had deteriorated significantly.
27	Meningitis Now	4	Advice for parents and carers looking after a feverish child at home: bullet point 2, how to detect dehydration – we fell that reduced urine output should be added to this list e.g. checking a baby's nappy, or observing a child going to the toilet.
28	Royal College of General Practitioners	4	Safety netting is important. Spelling it out in a detailed way like this can be helpful, but more often than not it is the parent's intuition or a "third strike" rule (ie third contact with healthcare) or upcoming weekend that prevails.
29	British Medical Association	4	This draft Quality Statement is mechanistic rather than tailored to the individual circumstances of the patient

#### Stakeholders who submitted comments at consultation

- British Medical Association
- Coventry University
- Department of Health
- Meningitis Now
- NHS England
- Royal College of General Practitioners

- Royal College of Midwifery
- Royal College of Nursing
- Royal College of Paediatrics and Child Health
- Royal College of Psychiatrists
- Royal Pharmaceutical Society
- University of Liverpool